



River Protection Project December 6, 2000

**R. E. (Rich) Larson
Manager**



Team Development of Engineering Controls for Work

- **The Issue**
 - **Prior Entry Into a Highly Contaminated Pit Resulted in a Release of Radioactive Material**
- **The Approach**
 - **Identify Team Members From all Groups to Assist in the Development of a Resolution**

Team Development of Engineering Controls for Work



- Teaming Concept

- Identify Members of the Team Based on Expertise or Experience With the Issue
 - Operations, Engineering, Radcon, Management, etc.
- Have the Operations Management Participate but not Control the Team
 - Engineering Selected to Manage the Team

CH2M HILL Hanford Group



Team Development of Engineering Controls for Work

- Teaming Concept (cont.)
 - Obtain Management Commitment to Follow Through with the Resolution
 - Resources (personnel and funding)
 - Equipment (procurement)
 - Verify Safety Commitment to the Team
 - Radcon Team Member
 - Crane and Rigging Team Member



Team Development of Engineering Controls for Work

- Teaming Concept (cont.)
 - Identify and Obtain Team Members Approval of the Goals
 - Achieve 99% Assurance That the Next Pit Entry Does Not Lead to Environmental Contamination
 - Verify the Resolution is Safe for the Personnel Involved in the Pit Entry Activities

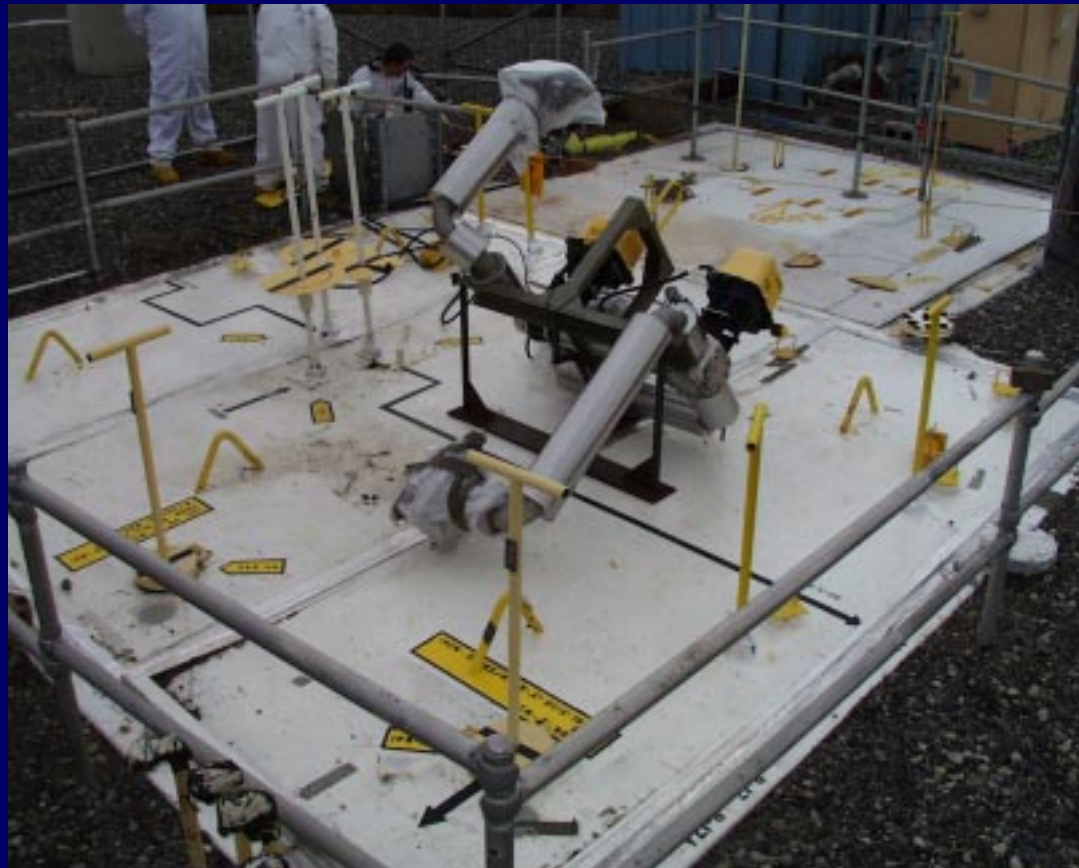


Team Development of Engineering Controls for Work





Team Development of Engineering Controls for Work





Team Development of Engineering Controls for Work





Team Development of Engineering Controls for Work

- Utilize the Teams (NPO's, HPT's, Engineering, Crafts, Planners, etc.) Experience to Enhance the Process
 - Identify Shortcomings of Current Approaches
 - Brainstorm on Alternatives
 - Use Innovative Concepts
 - Proven Technology
 - Obtain Buy-in From Participants



Team Development of Engineering Controls for Work

- **Develop a Preferred Alternative and a Backup Solution**
- **Review Available Hardware and Verify the Equipment is Adaptable to the Situation and to the Staff**
 - **Look at the Development of New Work Processes by Using the New Equipment**
 - **Is Staff Properly Trained**



Team Development of Engineering Controls for Work

- **Procure Equipment**
- **Ensure Staff is Given Time to Get Familiar With the Equipment**
 - **Mock-up Facilities**
 - **Training**
- **Develop Work Plan**
 - **Utilize Enhanced Work Planning and Job Hazards Analysis**



Team Development of Engineering Controls for Work

- **In Conclusion**
 - **Ensure Management and All Staff Involved in Every Phase of the Program**
 - **Utilize the Staff's Experience and Expertise**
 - **Verify Work Planning Process is Complete and Thorough - Use Safety Concepts as a Driver**
 - **Use Proven Technology**
 - **Provide Good Equipment and Training**